

INVENTORY CONTROL

Inventory control practices should follow the recommended standards as described by the American Petroleum Institute (telephone 202-682-8000) in API 1621 - Bulk Liquid Stock Control At Retail Outlets.

A basic summary of the "sticking" requirements are:

To assure consistency, it is recommended that the readings be taken, by the same individual at approximately the same time daily.

A gauge stick made of wood or nonsparking material, marked in 1/8 inch subdivisions, should be used.

The gauge stick should be inserted through the gauge hole of the tank and gently lowered to the tank bottom. Allowing the gauge stick to rapidly drop to the bottom of the tank will, after a period of time, harm the integrity of the tank bottom and the end of the gauge stick as well as cause inaccurate liquid level readings from splashing or wave motion. The gauge stick should always be centered in the same place and manner and be held in a vertical position. The stick should be withdrawn immediately to prevent the product from creeping up the stick.

The stick reading must be used in conjunction with a calibration chart furnished by the tank supplier.

Most charts have the volumetric readings based upon whole inches of tank gauge depth. The procedure to calculate the tank inventory is:

Read the chart for the exact inch reading above and below the actual stick gauge reading. Example: if the stick gauge reads 46-1/16 inches, read the chart at 46 and 47 inches.

Subtract the gallonage shown on the chart for the two readings.

Example: 47" at 800 gallons
46" at 760 gallons
40 gallon difference

Multiply the difference by the fraction of an inch of the actual stick gauge reading. 1/16" = 6.25%, 1/8" = 12.5%, 1/4" = 25%, 1/2" = 50%, 3/4" = 75%

40 gallons x 6.25% (1/16") = 2.5 gallons

Add the gallonage from the whole inch reading on the chart for:

46" at 760 gallons, then add the calculation for
1/16" at 2.5 gallons
762.5 gallons of fuel in the tank (inventory)

Reconciliation: Tank inventory on 12/1/89 (6:00 a.m.)

by gauge-stick reading:	1,100 gallons
Product delivered to tank 12/1/89:	+ 1,500 gallons
less daily sales on 12/1/89:	<u>-(350) gallons</u>
Net Inventory:	2,250 gallons
Stick reading on 12/2/89 (6:00 a.m.):	<u>2250</u>
Gain or loss:	-0-

If a difference of more than 5 gallons per 1,000 gallons of product throughput per month is reflected in the monthly reconciliation, a system leak may exist and the system is losing product or taking in water. Other factors may include product theft or inaccurate meters.